

DYNARTmo: Instruction Manual (March 2026)

References and download of app:
see: www.speechtrainer.eu

Kröger BJ (2025a) DYNARTmo: A Dynamic Articulatory Model for Visualization of Speech Movement Patterns. arXiv:2507.20343. <https://arxiv.org/abs/2507.20343>

Kröger BJ (2025b) The 2D+ Dynamic Articulatory Model DYNARTmo: Tongue-Palate Contact Area Estimation. arXiv:2508.07262. <https://arxiv.org/abs/2508.07262>

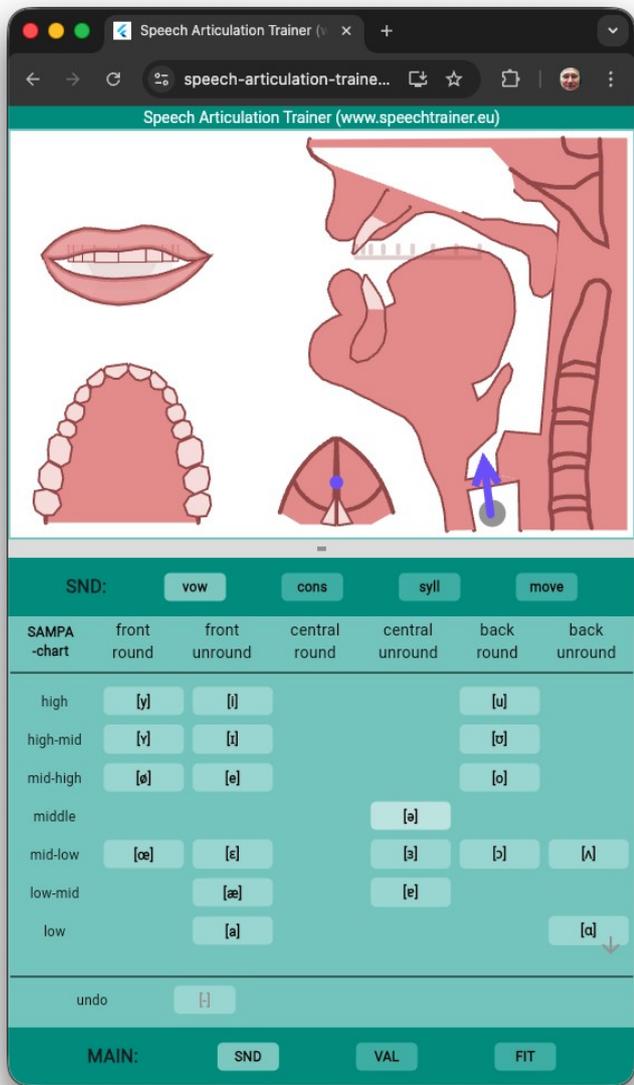
Kröger BJ (2025c) The Dynamic Articulatory Model DYNARTmo: Dynamic Movement Generation and Speech Gestures. arXiv:2511.08372. <https://arxiv.org/abs/2511.08372>

Kröger BJ (2025d) Lips-Jaw and Tongue-Jaw Articulatory Tradeoff in DYNARTmo. arXiv:2511.22155. <https://arxiv.org/abs/2511.22155>

Start the web app:

- Use any web browser. Preferably google chrome:

<https://speech-articulation-trainer.web.app>

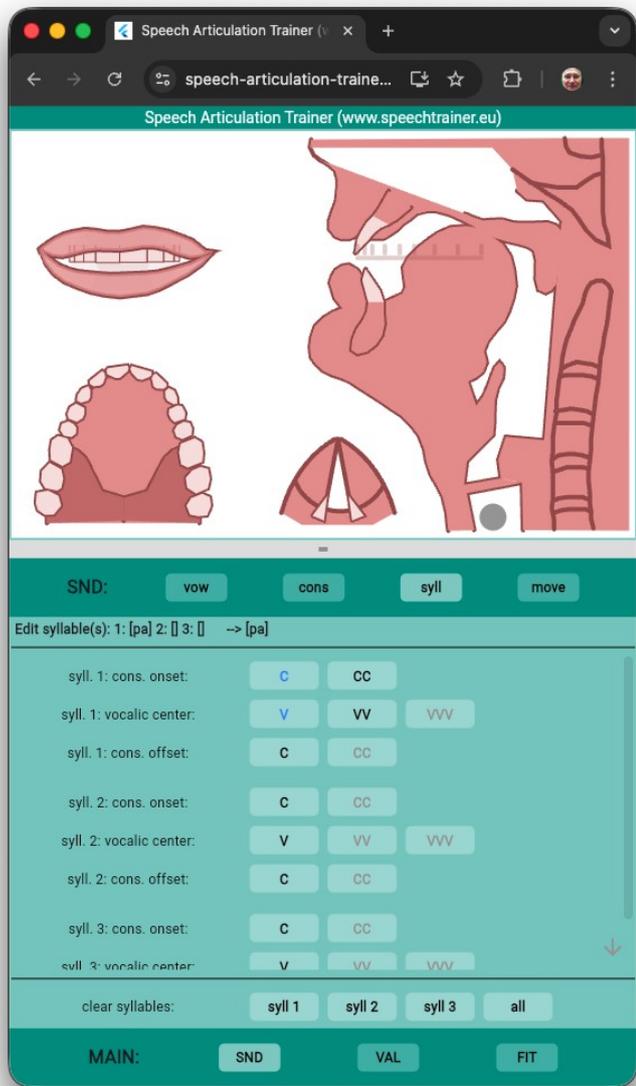


views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

submenu SND:
vowels, consonants, syllables, movie

button window (input):
IPA chart: vowels, consonants

main menu MAIN:
sound, value, fit



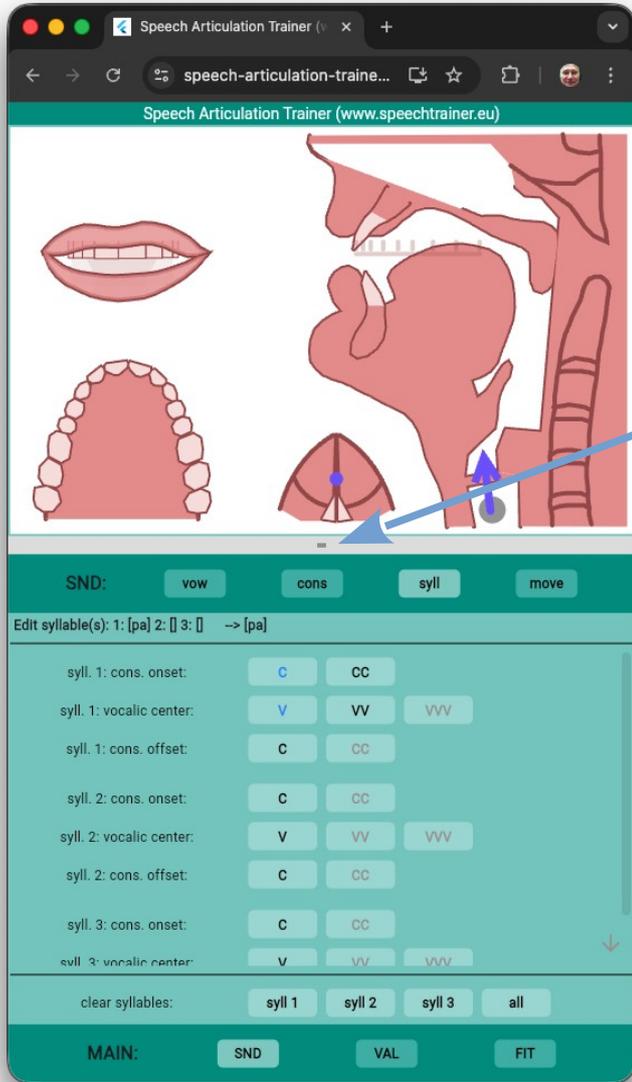
views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

see: tongue-palate contact area
arrows: air flow, phonation (slide above)
point: lung pressure

submenu SND:
vowels, consonants, syllables, movie

button window (input):
IPA chart: consonant /k/

main menu MAIN:
sound, value, fit



views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

change height (width of subwindows)

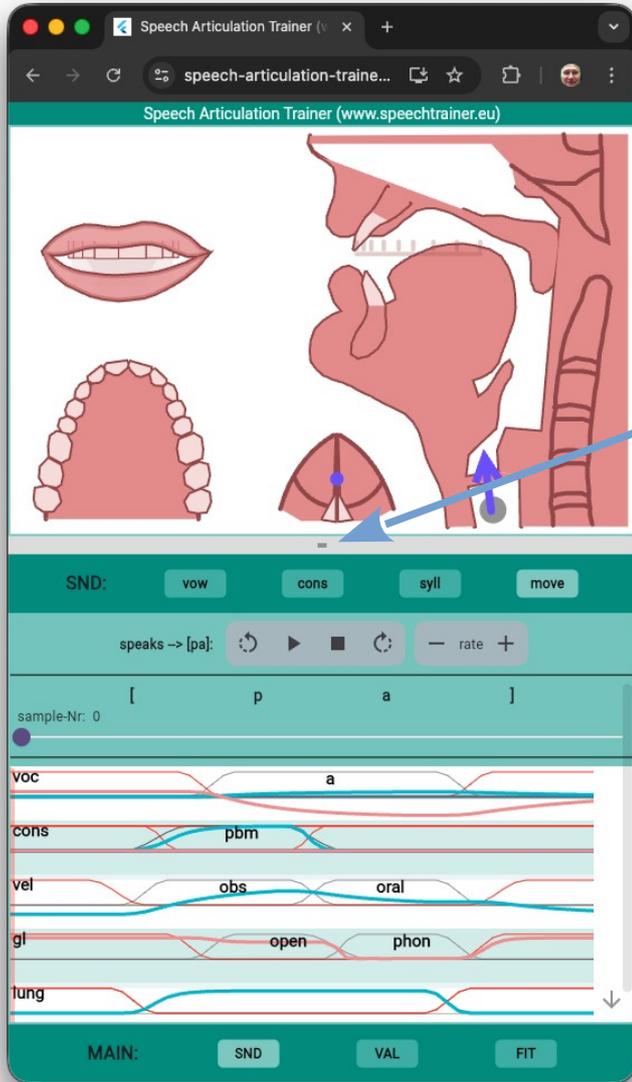
submenu SND:
vowels, consonants, syllables, movie

edited syllable (up to three syllables)

blue: position already set
black: position currently available for setting

button window (input):
syllable positions: Cs and Vs

main menu MAIN:
sound, value, fit



views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

change height (width of subwindows)

submenu SND:
vowels, consonants, syllables, **movie**

movie control

syllable produced

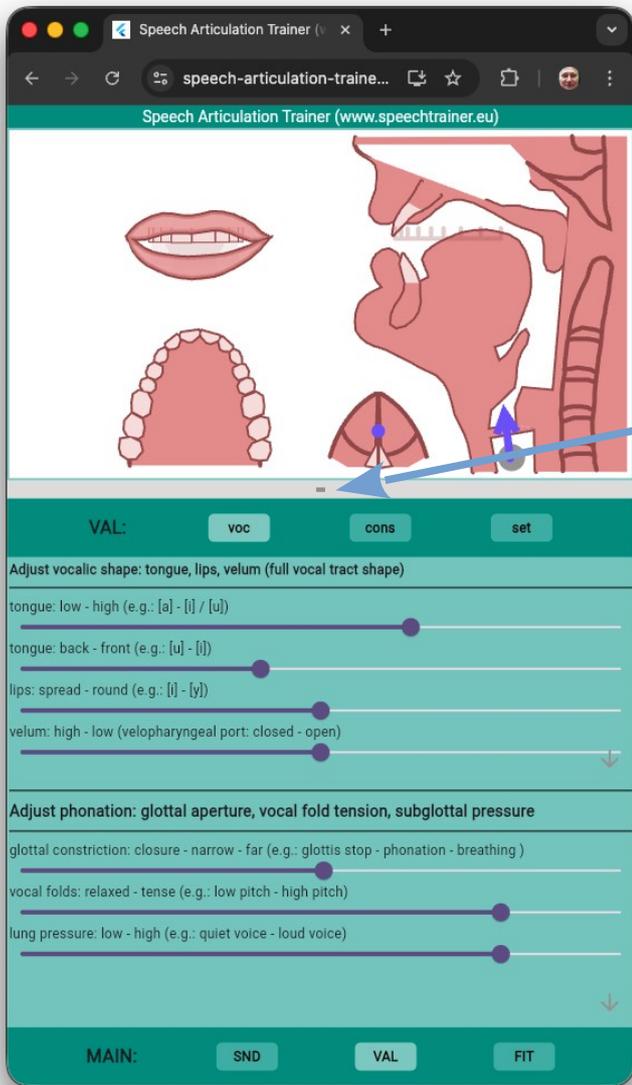
position or process slider

utterance window (control parameters over time):

thick blue, red, grey: vocalic, consonantal, velum, glottal,
and lung articulation

thin red, grey: gesture activation level

main menu MAIN:
sound, value, fit



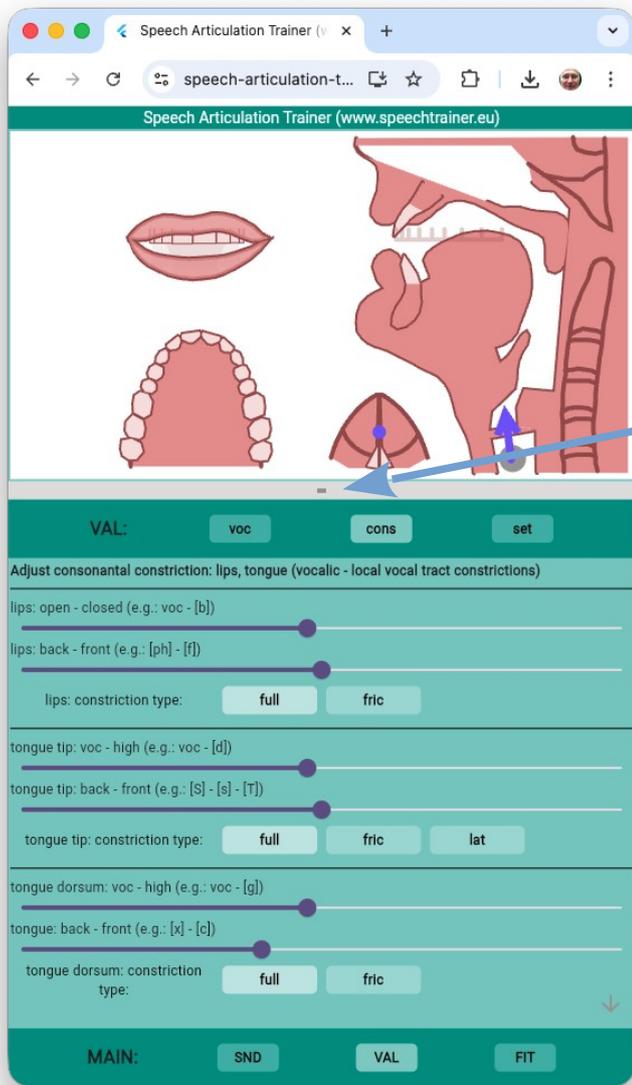
views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

change height (width of subwindows)

submenu VAL:
vocalic, consonantal, set parameters

slider window (input):
vocalic parameters
glottal and subglottal parameters

main menu MAIN:
sound, value, fit



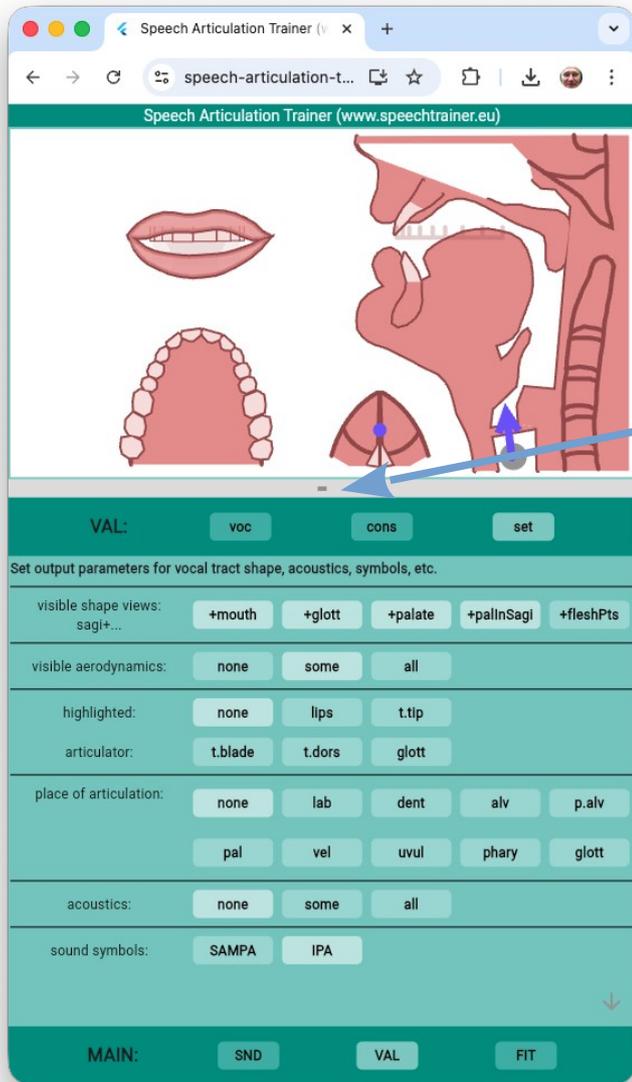
views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

change height (width of subwindows)

submenu VAL:
vocalic, **consonantal**, set parameters

slider window (input):
consonantal parameters
including constriction type selection

main menu MAIN:
sound, **value**, fit



views (output): mouth, tract (mid-sagittal view)
palate (view from below), glottis (from above)

change height (width of subwindows)

submenu VAL:
vocalic, consonantal, **set parameters**

button window (input):
settings for visible shape views, for visible aerodynamics (arrows),
for highlighted articulators and places of articulation,
for output acoustics, for sound symbols

main menu MAIN:
sound, **value**, fit